FIG.1

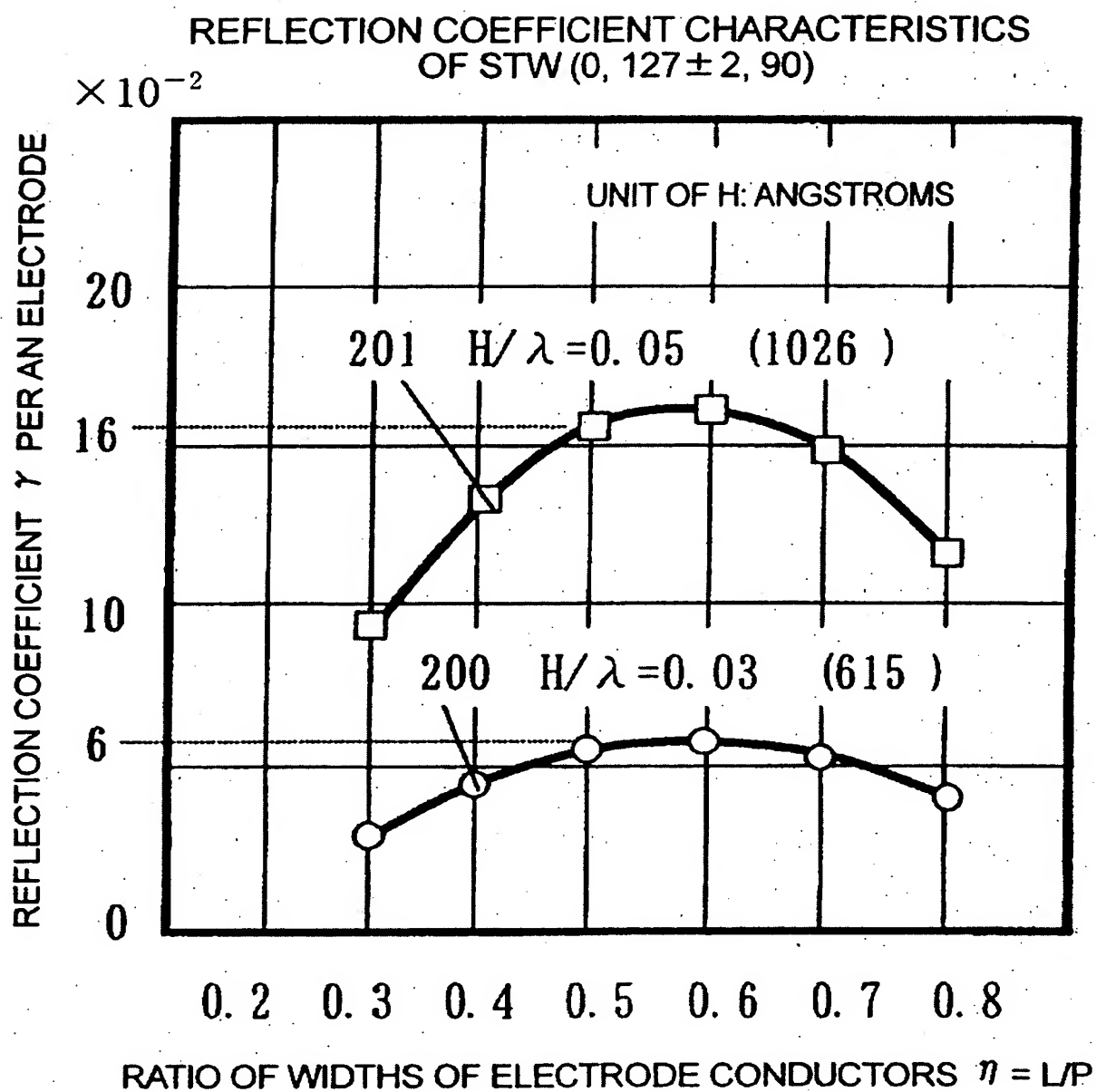## REFLECTION COEFFICIENT CHARACTERISTICS
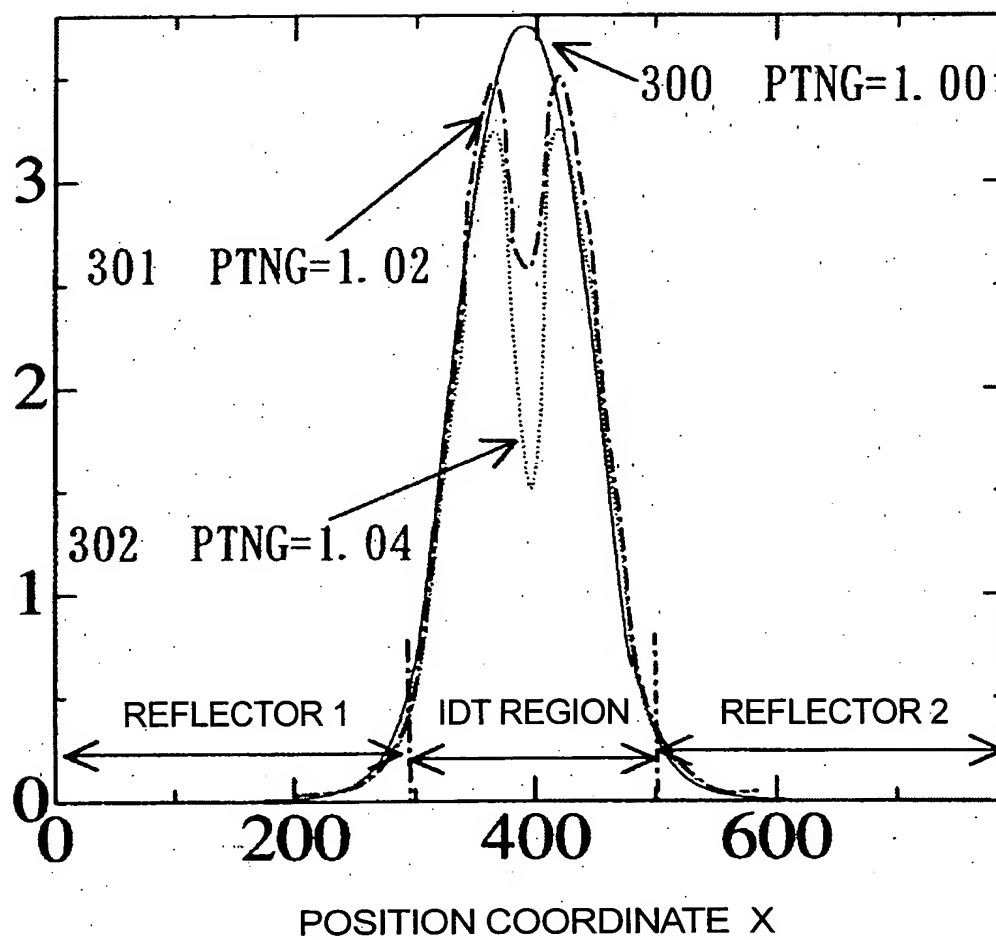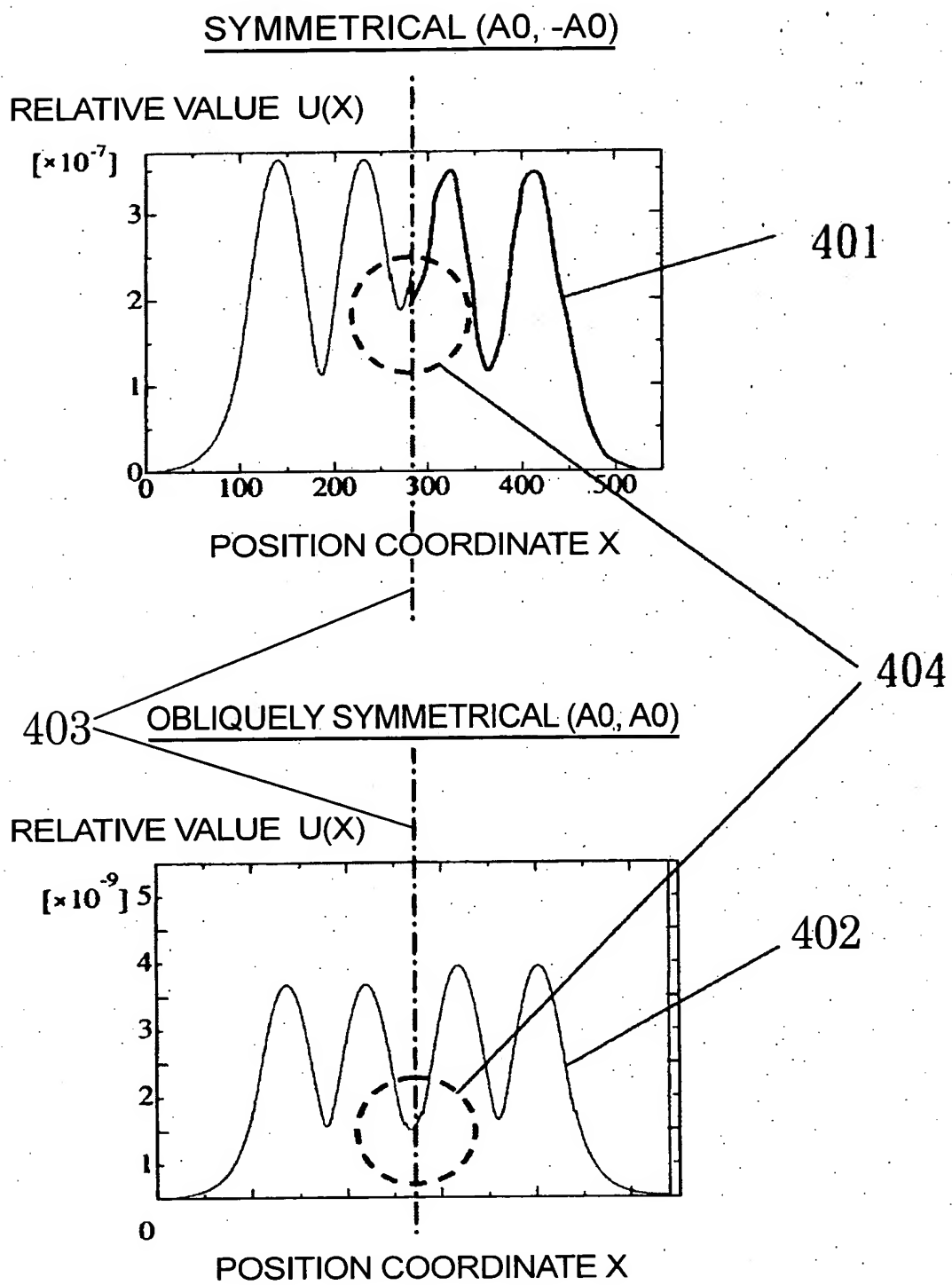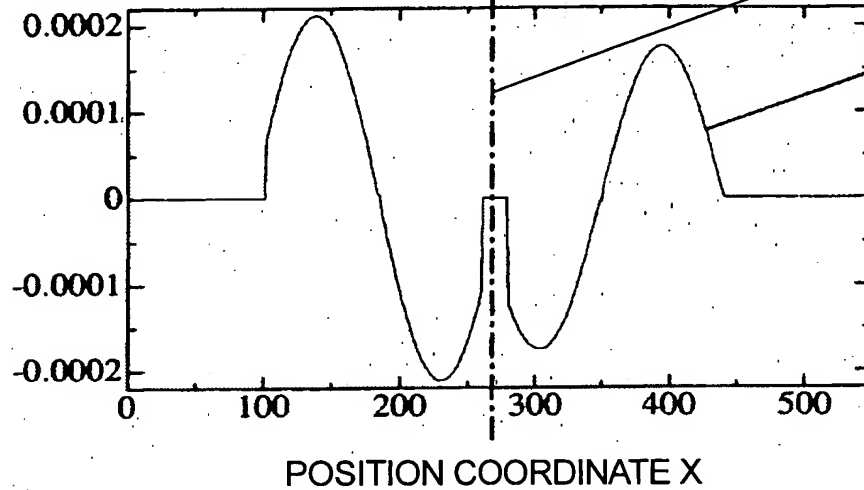## OF STW (0, 127 ± 2, 90)

FIG.2

RELATIVE ENVELOPE DISPLACEMENT U(X)

FIG. 3

SYMMETRICAL (A0, -A0)

RELATIVE VALUE U(X)

$[\times 10^{-7}]$

401

POSITION COORDINATE X

404

403

OBLIQUELY SYMMETRICAL (A0, A0)

RELATIVE VALUE U(X)

$[\times 10^{-9}]$

402

POSITION COORDINATE X

FIG. 4

SYMMETRICAL (A0, -A0)

RELATIVE ELECTRODE CHARGE Q(X)

POSITION COORDINATE X

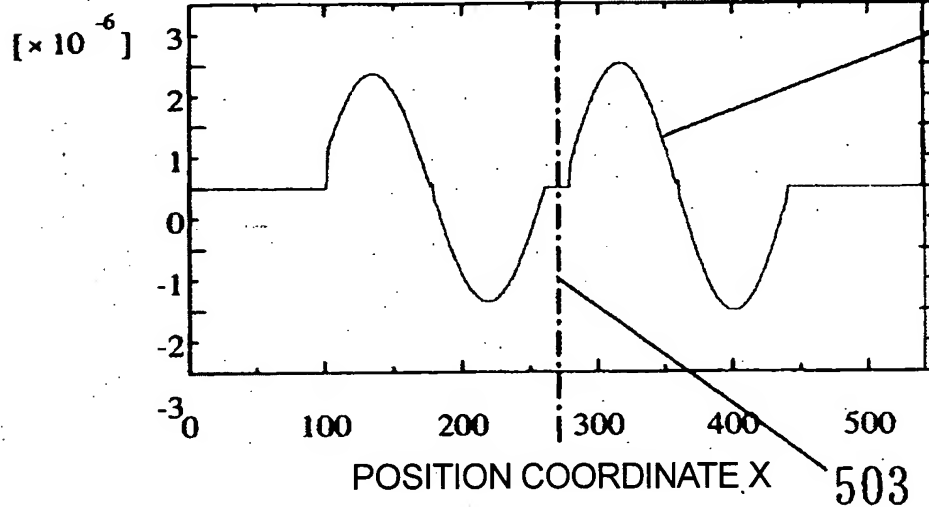## OBLIQUELY SYMMETRICAL (A0, A0)

RELATIVE ELECTRODE CHARGE Q(X)

POSITION COORDINATE X

FIG. 5

OBLIQUELY SYMMETRICAL (A0, A0) STATE

RELATIVE CHARGE Q(X)

601

$[\times 10^{-6}]$

COORDINATE X

603

PHASE WEIGHTING FUNCTION W(X)

604

602

BPSKW= (1, −1, −1, 1)

IDT RELATIVE COORDINATE X

FIG. 6

IN THE CASE OF A0 MODE

Sb (dB)

702   S0   mode

701

6.466dB

-54000   -52000   -50000   -48000   -46000   -44000

FREQUENCY CHANGE   df/f (ppm) ,   1000ppm/div

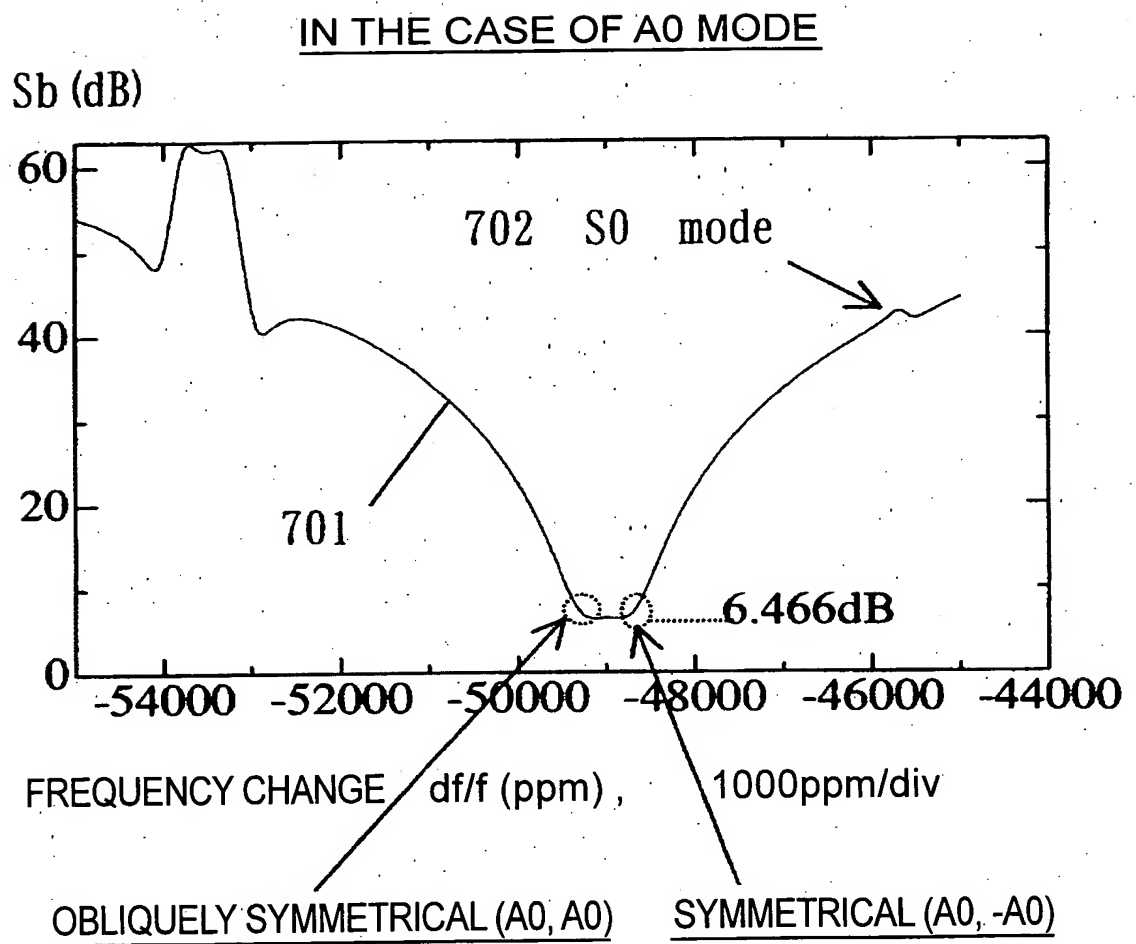OBLIQUELY SYMMETRICAL (A0, A0)   SYMMETRICAL (A0, -A0)
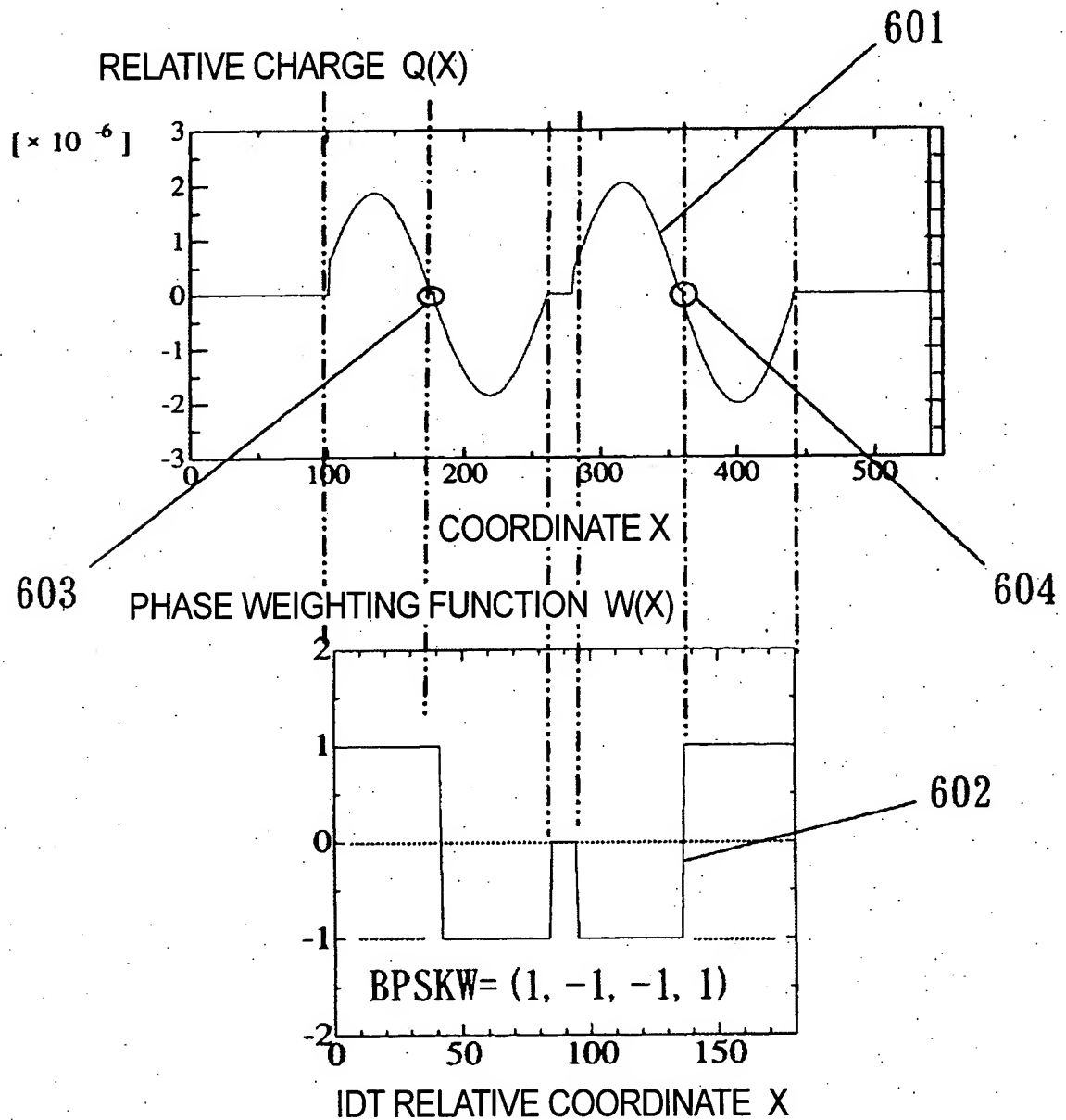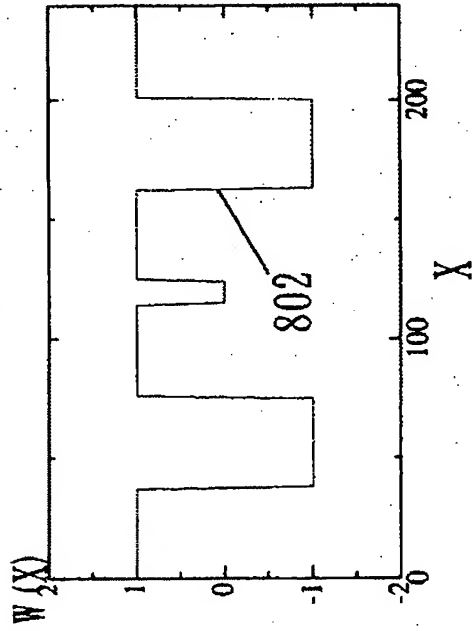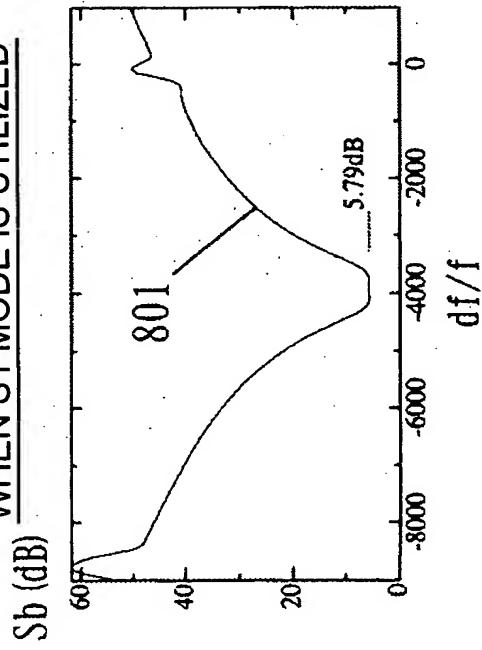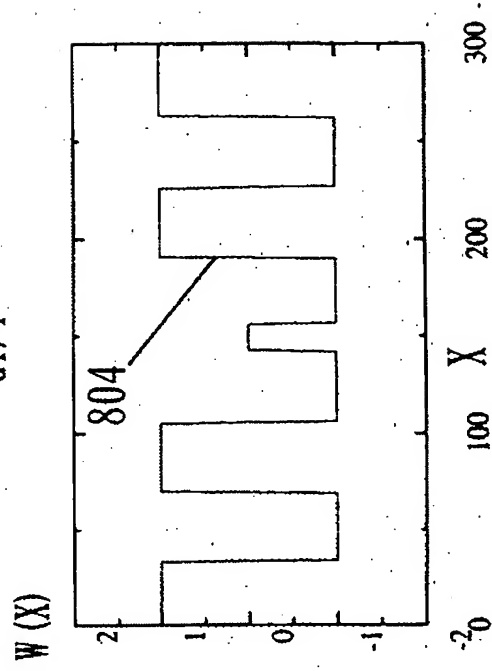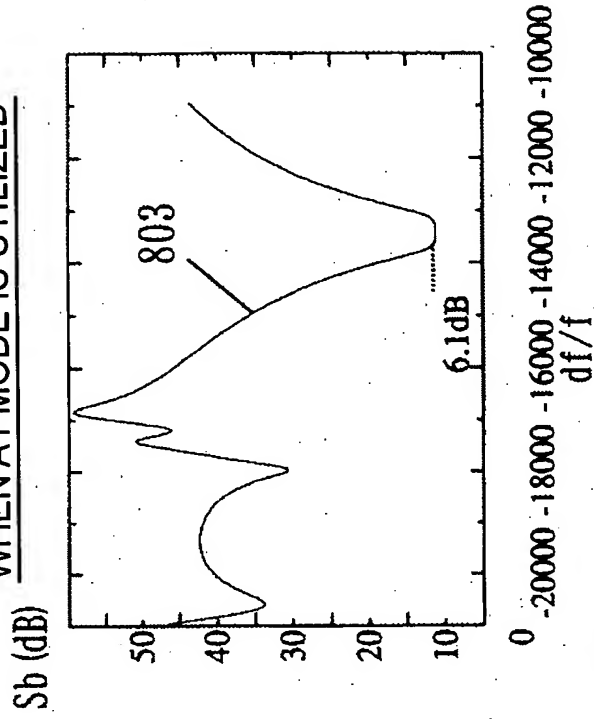
FIG. 7

WHEN S1 MODE IS UTILIZED

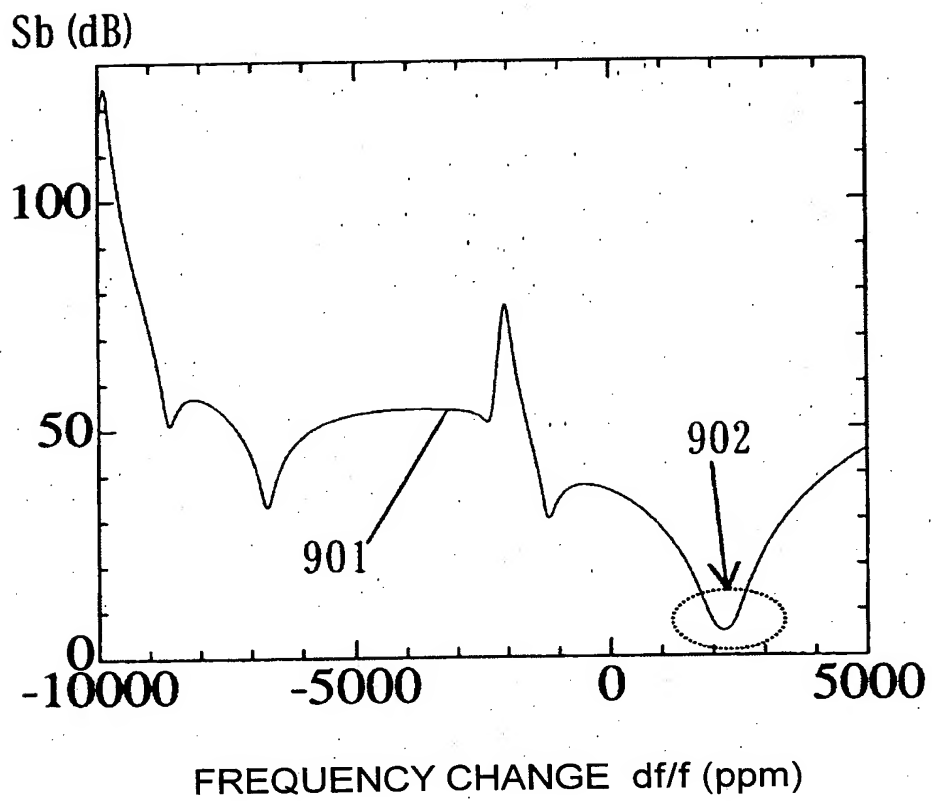WHEN A1 MODE IS UTILIZED

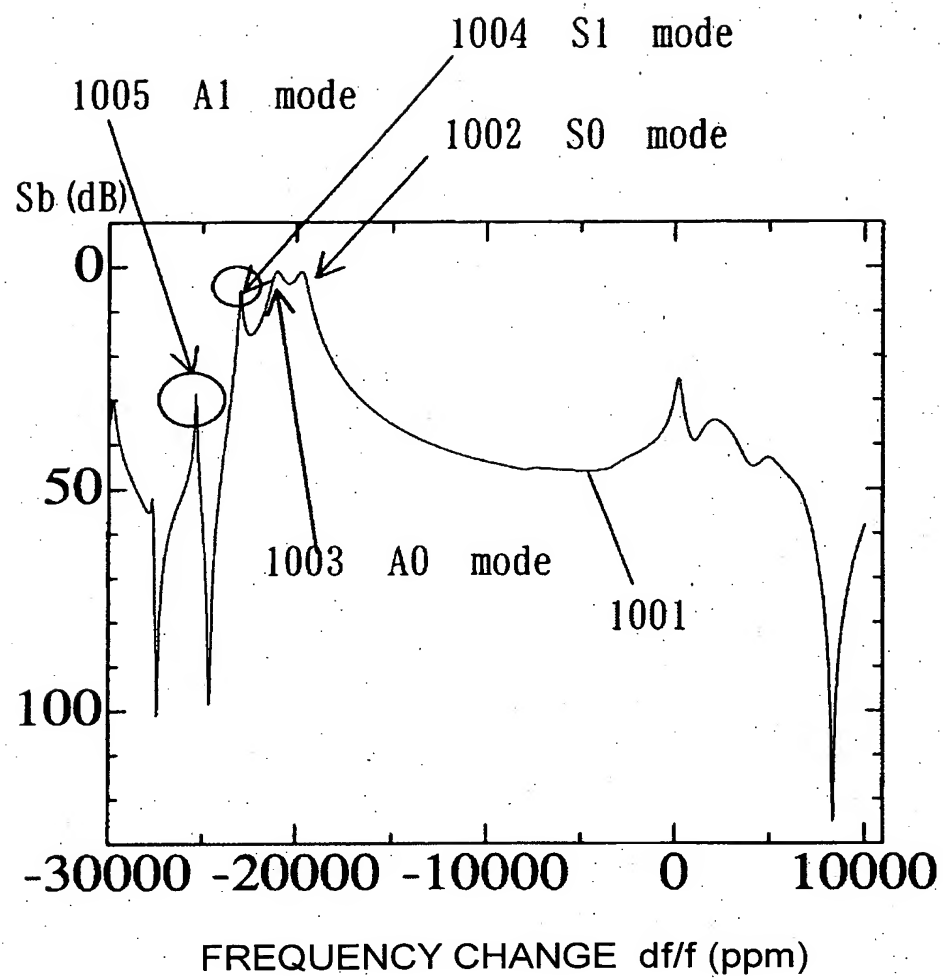FIG. 8

WHEN S0 MODE IS UTILIZED

FIG. 9

FIG.10

U (X)

1100 (S0) mode

U (X)

1101 (A0) mode

U (X)

1102 (S1) mode

U (X)

1103 (A1) mode

FIG.11

FIG.12

Z (OPTICAL AXIS)

Z'

1 3 0 5

θ

1 3 0 4

1 3 0 1

Y (MECHANICAL AXIS)

O

1 3 0 3

1 3 0 0

X (ELECTRIC AXIS)   1 3 0 2

1 3 0 6

o

x = **Z'**

1 3 0 5

Ψ

1 3 0 0

y = **X**   1 3 0 2

FIG.13

FIG.14